

1000 Series Seabed Beacon



Key Features

- AAE proprietary Sigma bi-directional Spread Spectrum technology
- Quick, easy configuration
- Survival depth to 4,000m as standard

1000 Series Seabed Beacons have long life battery options that make them ideal for long term reference points, USBL calibration beacons and Dynamic Positioning reference markers.

1000 Series Seabed beacons incorporate Applied Acoustics' proprietary Sigma acoustic protocols proven for use with AAE's USBL tracking systems, other manufacturers' USBL systems operating with wide bandwidth transmissions as well as those using 'narrow band' tone signalling.

Applications

- General purpose tracking and positioning applications for deeper water applications or in an acoustically challenging environment
- Static and dynamic operations

Technical Specification

MODEL TYPES – PHYSICAL SPECIFICATION

Housing material; Hard anodised aluminium with protection cages

	Beam Pattern	SPL	Survival Depth	Diameter	Length	Weight air/water
1059	±90°	188dB	4000m	125mm	1095mm	22.0kg/11.0kg
1055	±45°	195dB	4000m	125mm	1095mm	22.0kg/11.0kg
1055H High Power	±45°	200dB	4000m	125mm	1095mm	22.0kg/11.0kg

ELECTRICAL SPECIFICATION

Battery

Battery type	Rechargeable. NiMH as standard
Listening life	Typically one year

1000 Series Seabed Beacon Technical specification continued...

Operational life, AAE Spread Spectrum	Dependent on pulse rate and operational mode. 1059: 1800 hours at 1.0pps 1055: 1200 hours at 1.0pps 1055H: 500 hours at 1.0pps Operational life reduced when used with non AAE USBL systems
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Configuration

Transmit frequency range	24 – 33.5kHz
Receive frequency range	17 - 31kHz
Turn around time	15/30/60/100ms dependent on channel selection
Transmit pulse width	1.5/3.0/10ms dependent on channel selection

External Inputs

Connector type	MCBH10M 10-way connector
Responder key	+ 5 to 25 Volts
External power	22 to 35 Vdc@120mA
Charge	1083 Multi-Charger, typical cycle charge time, 20 hours.

USBL COMPATIBILITY

AAE 1000 Series beacons use Tone, Chirp, MFSK, DSSS and FHSS as transmission/reception protocols, allowing cross-compatibility with many USBL systems, including:

AAE Nexus	Spread Spectrum systems
AAE Easytrak	All models, tone systems
iXBlue	GAPS USBL
Kongsberg	HPR/HiPAP
ORE/Edgetech	USBL
Sonardyne	USBL

OPTIONS

Compatibility with USBL systems not listed above

Non-rechargeable batteries (alkaline)

Depth sensors 100m/300m/1,000m/2,000m/4,000m (adds D suffix to model number)

Digital depth transmission when used with AAE Nexus USBL systems

Please consult the AAE sales team for further information



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Due to continual product improvement, specification information may be subject to change without notice.
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